The Report Committee for Andrew Joseph East
Certifies that this is the approved version of the following report:

Mutually Assured Construction: Resurrecting the West Texas Missile Silos

APPROVED BY
SUPERVISING COMMITTEE:

Supervisor:

Tracy Dahlby

Robert Brenner

Mutually Assured Construction: Resurrecting the West Texas Missile Silos

by

Andrew Joseph East, BA

Report

Presented to the Faculty of the Graduate School of

The University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the Degree of

Master of Arts

The University of Texas at Austin

May 2016

Dedication

To my future wife, Deidi Olaya, for her unconditional love, encouragement and patience, my parents, the University of Texas at Austin School of Journalism faculty and staff and anyone else who believed in me along the way. And to Warren Zevon for “Lawyers, Guns and Money.”

Abstract

Mutually Assured Construction: Resurrecting the West Texas Missile Silos

Andrew Joseph East, MA

The University of Texas at Austin, 2016

Supervisor: Tracy Dahlby

Abstract: A group of enthusiasts near Abilene, Texas are turning decommissioned, Cold War-era nuclear missile silos into homes, doomsday shelters, historical monuments and businesses, offering a unique glimpse into the blue-collar, do-it-yourself psyche of a region of Texas forged during the Cold War.

Table of Contents

MUTUALLY ASSURED CONSTRUCTION: RESURRECTING THE WEST TEXAS MISSILE SILOS

It was high noon, a gusty January day on the West Texas prairie, and deep inside a decommissioned, subterranean military facility 20 miles southwest of Abilene, it was business as usual for Mark Hannifan, an entrepreneur who is trying to turn a doomsday device into an unlikely moneymaking machine.

One hundred feet below the hardscrabble surface, Hannifan stood on a floating platform surrounded by 59-degree water in a cement chamber 52 feet in diameter and 174 feet from bottom to top. Only the occasional air bubble broke the surface of what has to be one of the nation's most unusual scuba-diving sites.

"People already expect you to be crazy if you own one of these things," he said of the missile silo he bought in 1982 for an undisclosed amount that he has turned into Dive Valhalla, a business he claims is growing. Speaking of the five divers currently working their way up from exploring the 25-foot-tall pile of rubble at the bottom of the silo, Hannifan said: "If you don't meet them halfway, they're disappointed."

Standing there, waiting for the divers to surface, Hannifan pointed with pride to the Dive Valhalla logo on his polo shirt—a scuba diver with a cowboy hat riding a nuclear bomb like actor Slim Pickens in the 1964 cult-classic film "Dr. Strangelove." Soon enough, the intensity of the bubbles increased, followed by a spattering of water as Hannifan's customers scrambled onto the platform in their inky wetsuits.

"It's kind of like free falling out of an airplane," said Pryce Williams, an aircraft technician from Oklahoma City, who had just taken the plunge. "You just fall about 100 feet and that's where all the debris starts. There's all sorts of things down there—staircases, ladders, doors, platforms, ducting."

Hannifan owns one of 12 decommissioned silos in the Abilene area that served as launching pads for the U.S. Air Force Strategic Air Command's first generation of intercontinental ballistic missile, the Atlas F, at a time in the 1960s when the United States and the Soviet Union were locked in a global economic, geopolitical and existential test of wills. The U.S. had positioned 72 underground silos across the country—12 each in Roswell, N.M.; Lincoln, Neb.; Plattsburg, N.Y.; Altus, Okla.; Salina, Kan. and Abilene—that, theoretically at least, would have allowed the U.S. to strike the Soviet Union in retaliation to a nuclear attack.

Today, the silos are little more than dilapidated, 383,000-square-foot holes in the ground that have found a second life at the hands of enthusiasts who can afford the five-to-six-digit price tags to turn the sites into homes, doomsday shelters, historical monuments and businesses. In the Lone Star State, these relics of Cold War brinksmanship have become an intersection of West Texas ingenuity and idealized history. The newfound owners—driven by motives as varied as the desire to turn a profit, deep mistrust of the federal government, owning a piece of history or facing the challenge of taming the raw structures—offer a glimpse into the blue-collar, do-it-yourself psyche of a region of Texas forged during an unsettling moment in American history some of their owners hope will attract visitors, many of whom have no direct experience with the chilly Cold War past.

To Hannifan it is a business enterprise that targets scuba divers and prospective doomsday preppers seeking to build bunkers reminiscent of the fallout shelters of the 1960s. To Lawn, Texas silo owner Larry Sanders, it is the launching pad for a historical interpretation crusade rooted in American nationalism. For Oplin, Texas silo owner Bruce Townsley, it is the ultimate do-it-yourself remodeling project.

"[The Atlas F] had a crucial role in humanity's survival during the most treacherous time in mankind's history," said Sanders, who also founded Atlas Missile Base Cold War

Center in the West Texas town of Lawn, a nonprofit organization dedicated to Cold War historic preservation.

The existence of these silos, Sanders said, dissuaded the Soviet Union from launching nuclear strikes on the U.S. or its allies—evading nuclear Armageddon: "The fact that we never had to use them proves their monumental value as a deterrent weapons system."

But not everyone shares his interpretation of Cold War history.

H.W. Brands, a best-selling author and history professor at the University of Texas at Austin, said it is possible the belief that nuclear war would be a "mutual suicide pact" may have prevented nuclear strikes during the Cold War, but other factors such as global free trade may have contributed.

"The commonly adduced answer to why no World War III was that there were these nuclear weapons, and nothing could justify the risk of going to nuclear war," Brands said. "I suspect it is a little more complicated than that. [But] it might be true. These are improvable things because World War III hasn't happened yet."

Each Atlas F missile was 82 feet tall and weighed 270,000 pounds when fueled. Its top speed was 16,000 miles per hour and could reach a target at its maximum range, 6,750 nautical miles, within 43 minutes, potentially delivering a nuclear payload of 4.5 megatons, or nearly 125 times the combined force of the atomic bombs that devastated the Japanese cities of Hiroshima and Nagasaki during World War II. The Atlas F sites, as described by Pentagon officials in a Sept. 28, 1961 article in The New York Times, were "the first hard underground silo complexes protected against all but a direct hit by all but the heaviest thermonuclear warheads." But as ballistics technology continued advancing, the Atlas F was obsolete by 1965, prompting the U.S. Air Force to remove the missiles and auction the silos to the highest bidders. Currently, the U.S. has 450 active nuclear missile silos—150

each near Cheyenne, Wyo.; Great Falls, Mont. and Minot, N.D.—that house the LGM-30 Minuteman ICBM, according to the U.S. Air Force Global Strike Command, which oversees the U.S. nuclear arsenal. Each missile has an approximate range of "6,000-plus miles" and carries a nuclear payload of 1.2 megatons, or one-fourth the power of the Atlas F.

"Diving in here is an experience," Hannifan said. "The people who come here have been diving all over the place, but they have never been in a missile silo before."

When Hannifan purchased his Cold War-era military outpost in 1982 and became the third private owner of the silo, making money was not in the cards. He and his wife Linda wanted to turn it into a doomsday shelter, but they could never find the time to spend there.

"We just weren't getting out there enough," said Hannifan, who repeatedly declined to reveal how much he paid for the silo or how profitable his business has become, saying it is "none of your damn business, to put it politely."

Hannifan put the silo up for sale in 1992, but before selling it, he wanted to scuba dive in it with a friend. After the dive, his friend asked why Hannifan didn't charge people to take the plunge. Now, 14 years later, dives typically cost from $60 to $140 and are booked in groups. Around 200 people dive in the silo each year, Hannifan said. But he has not lost his enthusiasm for shelter building and he is expanding his business with a bed and breakfast aimed at a certain "like-minded clientele"—doomsday preppers.

The Hannifans are renovating the launch-control center, a 19-foot-in-diameter, octagonal room where the guests will sleep. The center, now partitioned into 12 "rooms" by tie-died drapes fastened to a column in the middle of the room, once held the computer systems and ignition switches that would have launched a nuclear missile. Freeze-dried

food will be the only option on the menu. They expect reservations to cost around $100 per night and hope to place their first guests on lockdown later this year.

"I figure that our customers are going to be either [doomsday] preppers or folks who are considering building a shelter," Hannifan said. "Get the whole family out here and be locked in for 24 to 48 hours and find out if everybody is on board. If … your wife says, 'I ain't going in the [expletive] hole,' then I just saved you a lot of money."

Doomsday preppers prepare for catastrophic events by stashing food, building shelters and becoming self-sufficient. "Apocalyptic preparedness"—natural disasters, economic crash and the collapse of the federal government—are some of the calamities preppers get ready for, according to the American Prepper's Network's website, a national network of preppers that offers videos, podcasts, articles and expos on survival, preparedness and sustainable living.

"[Being a prepper] means not having to rely on someone else," Hannifan said. "We have an unsustainable economy… Let's face it, right now we're using a tremendous amount of resources for the size of our population."

Dan O'Hara, CEO of Dano Communications, a Cincinnati-based prepper network that hosts conventions across the country, with attendance varying between 1,500 and 15,000, estimates that the prepper industry is worth "$2 billion in sales" annually, including freeze-dried food, radiation detectors and emergency water filtration systems.

"As a movement it's small, but it's growing," O'Hara said. "It's about being prepared so you can survive. Between race, religion and the economy, it's a pretty fragile world. I don't think anyone knows how many preppers there are, but it's more than you think."

The preppers movement grew out of Cold War-era civil defense programs, according to Kenneth Rose, a history professor at the University of California Chico who

chronicled the history of shelter building in the U.S. in his book "One Nation Underground: The Fallout Shelter in America."

"There have always been people who have built shelters ever since the attacks on Hiroshima and Nagasaki," Rose said. "But shelter building in the U.S. got a huge push in 1961 when President Kennedy [announced his group shelter program]."

Kennedy made civil defense a cornerstone of domestic defense policy in the early 1960s. U.S. civil defense during the Cold War was an effort by the federal government to educate Americans on the dangers of nuclear war, identify evacuation plans and encourage the construction of public and private bomb shelters, such as Kennedy's $207.6-million group shelter program ($1.6 billion adjusted for inflation), which called for Americans to build bomb shelters. For poorer Americans, Pentagon officials recommended digging a "backyard 'dug-out,' roof it with planks and sandbags, and store emergency supply of water and canned goods," according to The New York Times.

"The initiation of a nationwide long-range program of identifying present fallout shelter capacity and providing shelter in new and existing structures… would protect millions of people against the hazards of radioactive fallout in the event of a large-scale nuclear attack," Kennedy told Congress on May 25, 1961.

But the push for shelters fueled a save-yourself mentality in people desperate to take control of their own destiny, Rose said.

An unnamed "Chicago suburbanite" made national headlines in 1961 after Time Magazine published an article on fallout shelters called "Gun Thy Neighbor."

"When I get my shelter finished, I'm going to mount a machine gun at the hatch to keep the neighbors out if the bomb falls," the suburbanite told the magazine. "I'm deadly serious about this. If the stupid American public will not do what they have to to save

themselves, I'm not going to run the risk of not being able to use the shelter I've taken the trouble to provide to save my family."

In Austin, local hardware dealer Charles Davis told Time Magazine that he had equipped his fallout shelter with four rifles, a .357 magnum pistol and a tear gas gun to smoke out anyone who tried to infiltrate his shelter: "[The door] isn't to keep radiation out, it's to keep people out."

In the American southwest, conflict was also brewing, as noted by Pulitzer Prize-winning reporter Gene Sherman of The Los Angeles Times in July 1961: "We may yet avert war over Berlin, although a crisis is developing between Los Angeles and Las Vegas."

A civil defense official in Las Vegas had unveiled plans earlier that month to mobilize a 5,000-person militia to repel "an estimated million Southern Californians" fleeing nuclear fallout who officials feared would "plunder" Nevada's resources "like a swarm of human locusts" in the aftermath of a nuclear strike on the Golden State, according to United Press International. The Los Angeles Times reported that the Nevada official later said the militia would not block Californian "nuclear refugees" from entering Nevada, but place them into "19 dispersal and welfare areas."

"It really represented the worst of the Cold War," Rose said. "It was very symbolic of the great anxiety that people had about nuclear war."

When the Soviet Union collapsed in 1991, the enemy the U.S. had been battling for 40 years vanished, and the U.S. military spending that officials believed the Cold War justified began to weigh down the U.S. economy, Brands said. And therefore, Americans directed their fears and anxieties inward as they perceived weakness in American institutions.

“There’s this moment at the end of the Cold War when Americans thought, ‘all of our troubles are over… we can focus on making this nation strong and prosperous,’” Brands said. “But no sooner had the Cold War ended, other concerns rose to the level of national attention. There was this moment of triumphalism, and then there was a disillusionment that set in that peace didn’t reign throughout the world. And where trouble emerged, it was trouble sometimes that the United States couldn’t resolve.”

Without a clearly defined enemy, the anxiety that Americans had over nuclear war shifted to American institutions after the Cold War, planting the seeds for the deep mistrust of the federal government that permeates the U.S. today, according to Art Markman, a psychology professor at the University of Texas at Austin.

“During the Cold War there was a consensus in the United States that the Soviet Union was the enemy...,” Markman said. “And now there is much more mistrust internally than externally. While there are some people who are concerned that doomsday is going to come as a result of radical Islamic terrorism, what you have is much more a concern about our own institutions and the internal collapse of the United States.”

Several crises since the 1990s have fueled the preppers movement, including the September 11th attacks, the financial crisis in 2008, the Ebola outbreak in West Africa, contaminated water supply in Flint, Mich., the Mayan calendar purportedly ending on Dec. 21, 2012 and Y2K, the fear that society would collapse at the turn of millennium because of a worldwide computer glitch in which computers using two-digit dates would equate the years 1900 and 2000.

But for preppers, exhibit A was the government response to Hurricane Katrina, which devastated New Orleans in 2005. Around 30,000 evacuees were shuffled into the Superdome, which quickly descended into chaos. The Seattle Times sent a reporter to the scene: “A 2-year-old girl slept in a pool of urine. Crack vials littered the restroom. Blood

stains the walls next to vending machines smashed by teenagers… at least two people, including a child, have been raped as the arena darkened at night. At least three people have died…"

The storm had caused 53 breaches in the city's federally-built levees, and water from the Gulf of Mexico surged into the city. More than 1,500 people died and hundreds of thousands were displaced, according to official figures. Inside the Superdome, sanitary conditions quickly deteriorated. There was no electricity or running water and by the time the government evacuated the final group of storm victims from the stadium—eight days later—six people had died, and images of looting and lawlessness in New Orleans were flooding television screens around the country.

"The people who took care of themselves were fine," Hannifan said. "The people who waited on the government to show up were sitting in the middle of the damn, stupid stadium piling up poop in bags, waiting on food."

Hurricane Katrina figures prominently on the American Preppers Network's website: "During Hurricane Katrina, the Federal Government finally got organized enough to set up a refugee camp at the Superdome. It quickly became a dangerous, even deadly, place to be and the government insisted—and in some cases forced—that you be there… Preppers do what they do so they do not have to rely on the government or anyone else to take care of them—no matter what happens."

The preppers movement ultimately boils down to how people react to a situation in which they feel they are not the authors of their own destinies, according to Markman.

"With the preppers movement, it's 'I'm going to seize control by learning to do everything for myself so that I am in control of my ultimate destiny.' And I think the preppers movement has taken that mindset to the extreme. So the folks in the preppers

movement are learning to grow their own food, clean their own water supply, make their own clothing, do their own health care."

Despite his business ambitions and banking on demand from the niche preppers market, Hannifan has not given up his shelter dream. If necessary, he said he and his wife can move into his silo, which already has a water supply.

"I would like to have the wherewithal to take care of ourselves if we needed to, and then you hope you never need to," Hannifan said.

Larry Sanders, who is transforming his Abilene-area missile silo into a visitor's center and virtual Cold War museum to honor the men who served in the silos waiting for the launch codes that never came, might be taking a cue from the iconic War Room scene in which Dr. Strangelove says: "The whole point of a doomsday machine is lost if you keep it a secret." Sanders wants everyone to know.

In 2010, Sanders found an Atlas F silo near Abilene that nobody wanted and bought it in a $54,000 lease-to-own agreement with the West Texas town of Lawn to establish a visitor's center and virtual Cold War museum.

"The reason why no one had moved to acquisition was the fact that this particular site was [a state-licensed] landfill," Sanders said. "At first, I assumed it was a 383,000-square-foot trash can, and that just wasn't the case."

Sanders said the city never deposited trash in the silo, but the silo was still in "horrible" condition. There was knee-deep water and four tons of hard-to-reach sand stood in his way of lowering equipment into the silo. Sanders has since removed rust, painted and replaced flooring. Within the next year, he said he plans to install heating, air conditioning and ventilation systems to safely store "Cold War assets," including thousands of images, manuscripts and documents that will be exhibited in the online virtual

museum. Currently he rents out the silo for events, including business meetings and catered meals, to fund his mission.

"It's an exciting way to get people exposed to Cold War history," Sanders said. "That's when history can go viral when you bring groups into that environment. In terms of Abilene groups, it really captures them when you remind them that the silos are only one-and-a-half stories less underground than Abilene's tallest building, [the 20-story Enterprise Tower], is above ground. These sites are truly monumental."

As the U.S. Army Corps of Engineers broke ground on the Abilene-area silos in 1961, it was the start of the second full decade of the Cold War. The period of geopolitical, military, economic and ideological tensions between the Soviet Union and the U.S. from the late 1940s to 1991 played out in a hazy imbroglio of diplomatic crises, proxy wars and covert U.S. military operations against leftist movements around the world.

"The way the U.S. looked at the world during the Cold War was that any conflict or any unrest in the world was largely seen as potentially impacting the balance of power between the U.S. and the Soviets," said Rodger Baker, a senior analyst at Stratfor, an Austin-based geopolitical intelligence firm.

U.S. corporations at the time sought to expand operations into as many new foreign markets as possible to boost profits and, ostensibly, to safeguard the U.S. economy from relapsing into the economic woes of the Great Depression. And these companies viewed the nationalization and redistribution of private property under communism as an economic threat.

"Americans feared the Soviet Union as this rival for the hearts and minds of the previously uncommitted peoples of the world," Brands said. "Americans thought that capitalism and democracy were the way the world ought to conduct its activities. The

Soviets believed that socialism and communism were the model for everybody around the world. The idea that much of the world might go communist seemed to be a threat."

The fear that if a country fell to communism, its neighbors would soon follow, largely fueled U.S. foreign policy, according to Baker, justifying military action in the Korean War in the 1950s and the Vietnam War in the 1960s and 1970s while the Central Intelligence Agency toppled or sabotaged regimes it believed were sympathetic to communism in Iran, Guatemala, Syria, Indonesia, Dominican Republic, Chile, Congo and many other countries.

"I think it is really appalling that America's longest-lasting military conflict has just been totally forgotten by America," Sanders said. "We don't celebrate that victory. We don't celebrate the people that were a part of it. And as Texans, we're especially negligent in recognizing the incredible role that Texas played in all aspects of America's Cold War victory."

Others might dispute Sanders' version of events.

"Americans looked at the Cold War and the way it ended by and large as a triumph of American values," Brands said. "The other side lost, we won. And a lot of Americans were beating their chests and saying, 'This shows how great America is.' There are two ways of looking at it, and they're not entirely exclusive. One is that 'we won' and the other is that 'they lost.' I would say that it was more 'they lost' than 'we won.'"

There are 13 Atlas F silos in Texas, all burrowed in the ground like radioactive gophers. The 12 near Abilene were operated out of Dyess Air Force Base under the command of the 578th Strategic Missile Squadron, and one in Fargo that was run out of Altus Air Force Base in Oklahoma.

All 12 Abilene-area sites were on standby to launch on Oct. 22, 1962 during the Cuban Missile Crisis, according to a declassified U.S. Air Force document. A U-2 spy

plane earlier that month had discovered medium-range nuclear missiles in Cuba, just 90 miles south of Key West, Fla. The discovery stunned Washington, which was not prepared to tolerate Soviet nuclear weapons a stone's throw from American shores. Kennedy ordered a naval blockade of Cuba and demanded the Soviets remove the missiles.

"The large powers understood that if things got out of hand things would shift quickly to nuclear war," Baker said. "… We came close with Cuba."

During the 13 days of crisis, the doctrine of deterrence that Kennedy espoused, "mutually assured destruction," faced its biggest test: "We will deter an enemy from making a nuclear attack only if our retaliatory power is so strong and so invulnerable that he knows he would be destroyed by our response," Kennedy told Congress on May 25, 1961.

Joe Brown, a missile facility technician at an Atlas F site in Nebraska, was on duty during the Cuban Missile Crisis.

"The Russians had intermediate range missiles in Cuba," Brown said. "They could strike the lower part of the United States and the East Coast, and they were manned by Russian crews."

A war would have been catastrophic, costing around 100 million American lives and 100 million Russian lives, according to the Belfer Center for Science and International Affairs at Harvard University.

"If Russia messed up, we were ready to put that 4.5-megaton R.V. right in downtown Moscow," Brown said. "If the right messages came and the keys had to be turned, I guarantee you, they would be turned."

After 13 days of tense negotiations between Soviet Premier Nikita Khrushchev and Kennedy, the crisis ended after the Soviet Union promised to withdraw its missiles from Cuba if the U.S. agreed to remove its missiles from Turkey.

“Things got tight,” Brown said. “You don’t know how close we come to launching nuclear missiles during the Cuban Missile Crisis. They sent out two, five-men crews to the launch complex for several days. We could hear the message traffic. It was rattling all the time. We were sending aircraft all over Florida to confuse the Cubans. We never knew where our targets were, Moscow, Leningrad or wherever. It was a scary situation.”

Sanders’ fascination with the Atlas F silos started as a college student at Abilene Christian University in 1977. He had met a high school teenager known as the “Atlas Adventurer,” who knew how to sneak into one of the Abilene-area silos.

“It was an Indiana Jones-esque experience,” Sanders said. “Looking back on that, I’m amazed that one of us didn’t die falling into the wrong point [of the structure]. But it was just amazing to enter one of those sites, experience the scale and the awe of an Atlas ICBM site. That is what fed my first curiosity and of course I was hooked from that point on.”

Bruce Townsley, who now owns the silo, said many teenagers had snuck into the silo and spray painted graffiti before he bought it.

“What do you do in West Texas when you’re done partying with your girlfriend?” Townsley said. “You go party in a silo. The land owner at the time did not do much to police his property.”

In 2000, Sanders, who was district coordinator for Texas Sen. Troy Frasier at the time, started a campaign to rename a 27-mile stretch of highway near Abilene, “The Atlas F ICBM Highway.” And in 2001, Texas Gov. Rick Perry signed the bill into law after the Legislature approved the proposal unanimously.

Sanders’ ultimate goal is for his silo to become the first 21st-century addition to the Texas Forts Trail Program, a historic tourism initiative by the Texas Historical Commission

that focuses on historic military outposts in the Lone Star State that date back to the Republic of Texas.

"I could do scuba diving at my site, too, but scuba diving is not my agenda," Sanders said. "Historic preservation is my agenda."

For Bruce Townsely, who has been living in the launch control center of an Atlas F silo 20 miles south of Abilene since 1999, his impetus to own a Cold War relic was not to survive doomsday or turn a profit—the silo was the ultimate fixer-upper.

Townsely, a retired social worker from Chicago and amateur remodeler, said he bought the silo from another private owner in 1997 for $99,000 after allegedly seeing Ed Peden tout his silo home on the Johnny Carson Show in the 1980s. Peden, co-founder of 20th Century Castles, a Kansas-based real estate agency founded in 1995 that specializes in selling decommissioned missile silos, did not recall appearing on the show.

Townsely's silo home is two floors and covers 2,200 square feet. He has equipped it with satellite television, a shower, plumbing and a kitchen. But he said remodeling it was much harder than he thought.

"I was really, really lucky when I bought mine," he said. "I didn't know enough to know what would be limiting factors to rehabilitating it. It was very trashy. There was a lot of graffiti. The biggest challenge was working with what it gave you. It's not like you can say, 'I think I'll open up that wall and put a window in it.'"

Leon Currier, a former travelling rodeo clown, self-described "daredevil" and founder of C2 Elite Construction, an Abilene-based construction company that has remodeled parts of two of the Abilene-area silos, said the silos' shape is particularly challenging.

“They’re just dark holes,” Currier said of the raw silos. “The hardest part is that you don’t have no square reference points to go off of.”

Townsely pumped out 40 feet of water from the silo and removed four metric tons of sand from the launch control center, which was mounted on springs to potentially withstand a nuclear blast. It swiveled side to side under his weight. It took him almost two years before he could move in.

“Taking on an Atlas F is a very daunting project,” said Peden, who has been living in an Atlas E missile silo since 1993 to protect himself from the “military-industrial complex.” “It’s a hardened underground structure. In some places the concrete is 15 feet thick.”

It can also be dangerous. Construction workers suffered “33 disabling injuries” and three people died while building the Abilene-area silos in 1961, according to a U.S. Department of Defense report. And when the silos went out of commission in 1965 after three years of operation, it was unclear who would want them.

The Austin Statesman offered suggestions in a March 3, 1965 article: “Mark each silo with a sign, ‘Texas-size rattlesnake hole’ for tourist attractions” or convert the sites into “the world’s largest 12-hole golf course.”

The following year, the silos attracted the attention of a 20th Century Fox executive who toured one of the sites in search of “futuristic dials and buttons, complete with flashing lights and ominous gauges” for the original “Batman” television series, according to The Washington Post.

Eventually a group of Texans who wanted to sell surplus metal and supplies purchased the 12 Abilene-area silos and one additional silo in Fargo, Texas near the Oklahoma border for $1 million, a fraction of the $18 million to $22 million the U.S. Air Force spent building each site. The surplus metals consisted of “enough air conditioning

equipment for an 18-story building, about 18,000 valves of all sizes and shapes, 18 small telephone exchanges, about a half million pounds of copper, 18 elevators… 18 computer systems [and] storage tanks with up to 30,000-gallon capacities," said Lawrence Steinberg, a member of the purchasing group in a 1966 interview with The Washington Post.

"The Atlas Fs were some of the deepest, biggest silos ever built," Peden said. "Every subsequent technology was smaller. Most Atlas Fs that anyone wants to sell have been bought. They're collectible, rare real estate. I talk to people every day who are interested."

By the time Townsely purchased the silo in 1997, he said the silo had changed hands four times.

"I just thought that it was cool as hell that you could buy something like that," Townsley said. "I had done some remodeling over the years and I thought [the silo] would make a fantastic remodeling project. And it has."

Townsely, like the other silo owners, sees his Cold War outpost as a lifelong project: "I wanted to have something to do for the rest of my life"—that is, until the next generation of silo owners takes the reins.

Bibliography

"A-Shelter Project Hit As Saving Men Only." *The Washington Post and Times-Herald*, August 3, 1961. http://www.proquest.com (accessed February 15, 2016).

"Abilene Atlas Complex Ahead of Schedule." *The Austin Statesman*, October 12, 1960. http://www.proquest.com (accessed February 15, 2016).

Air Force Global Strike Command. "LGM-30G Minuteman III." afgsc.af.mil. http://www.afgsc.af.mil/Library/FactSheets/Display/tabid/2655/Article/630719/lgm-30g-minuteman-iii.aspx (accessed May 2, 2016).

American Preppers Network. "What is a Prepper?" americanpreppersnetwork.com. http://americanpreppersnetwork.com/what-is-a-prepper (accessed April 12, 2016).

"Atlas Sites Chosen in Texas, Oklahoma." *The Dallas Morning News*, January 27, 1960. http://www.proquest.com (accessed February 15, 2016).

"Atom Shelter Builders Finding Business Poor-- Contractor Says No Firm Can Survive on This Type of Construction in Southland ATOM SHELTERS." *The Los Angeles Times*, June 4, 1961. http://www.proquest.com (accessed February 15, 2016).

Baker, Rodger. Interview by Andy East. Phone interview. Austin, March 22, 2016.

Brands, H. W. Interview by Andy East. Tape recording. Austin, April 21, 2016.

Brooks, Dorothy M. "Berlin Crisis, Kennedy Speech Spark Interest In Shelters; Here's Advice." *The Chicago Defender*, September 9, 1961. http://www.proquest.com (accessed February 15, 2016).

Brown, Joe. Interview by Andy East. Phone interview. Austin, March 7, 2016.

Carleton, Don. Interview by Andy East. Phone interview. Austin, March 10, 2016.

Childs, Marquis. "Building Bomb Shelter Advocated, Condemned." *The Austin Statesman*, October 7, 1961. http://www.proquest.com (accessed February 15, 2016).

"Engineer Falls to his Death." *The Austin Statesman*, April 4, 1961. http://www.proquest.com (accessed February 15, 2016).

"Fall-Out Shelter Program." *The Chicago Defender*, September 12, 1961. http://www.proquest.com (accessed February 15, 2016).

Goshko, John. "D.C. Father of 8 Seeks To Build Shelter for 100." *The Washington Post and Times-Herald*, November 7, 1961. http://www.proquest.com (accessed February 15, 2016).

Goshko, John. "Kennedy Urges Program For Fallout Protection" *The Washington Post and Times-Herald*, October 7, 1961. http://www.proquest.com (accessed February 15, 2016).

Hannifan, Mark. Interview by Andy East. Tape recording. Abilene, January 20, 2016.

Hannifan, Mark. Interview by Andy East. Phone interview. Austin, April 27, 2016.

John F. Kennedy Presidential Library. "Excerpt, Address Before a Joint Session of Congress, 25 May 1961." jfklibrary.org. http://www.jfklibrary.org/Asset-Viewer/Archives/TNC-200-2.aspx (accessed April 25, 2016).

"KENNEDY FAVORS SHELTERS FOR ALL: Stresses Home Units -- Plan Promised for Protection Costing $100 to $150 KENNEDY FAVORS SHELTERS FOR ALL." *The New York Times*, October 7, 1961. http://www.proquest.com (accessed February 15, 2016).

Lonquest, John C. and David F. Winkler. “To Defend and Deter: The Legacy of the United States Cold War Missile Program.” The Department of Defense, 1996. http://www.denix.osd.mil/cr/upload/94-1264-LEGACY-US-COLD-WAR-MISSLE-PROGRAM_0.PDF (accessed April 1, 2016).

Markman, Art. Interview by Andy East. Tape recording. Austin, April 6. 2016.

O’Hara, Dan. Interview by Andy East. Phone interview. Austin, April 26, 2016.

Pacacha, Frederick S. “96th Strategic Aerospace Wing, 20 – 29 October 1962. Assigned to the Fifteenth Air Force, Strategic Air Command Permanently Stationed at Dyess Air Force Base, Abilene, Texas.” U.S. Air Force. http://www.foia.af.mil/reading/ (accessed January 15, 2016).

Pearson, Drew. “Kennedy Will Call for Shelters: Do-It-Yourself Shelters.” *The Washington Post and Times-Herald*, July 20, 1961. http://www.proquest.com (accessed February 15, 2016).

Peden, Ed. Interview by Andy East. Phone interview. Austin, February 29, 2016.

“PROTECTED BASES FOR ICBM'S GAIN: S.A.C. Soon to Put Missiles in Blast-Proof Areas.” *The New York Times*, September 28, 1961. http://www.proquest.com (accessed February 15, 2016).

Reston, James. “Kennedy Takes Cover From Fallout Over Family Bomb Shelter Plan.” *Los Angeles Times*, November 30, 1961. http://www.proquest.com (accessed February 15, 2016).

Rose, Kenneth. Interview by Andy East. Phone interview. Austin, April 5, 2016.

Sanders, Larry. Interview by Andy East. Phone interview. Austin, April 28, 2016.

“Shelter For $150 US Plan for CD.” *The Austin Statesman*, October 7, 1961. http://www.proquest.com (accessed February 15, 2016).

"Silos for Sale!" *The Austin Statesman*, March 3, 1965. http://www.proquest.com (accessed February 15, 2016).

Sims, Dave. Interview by Andy East. Phone interview. Austin, March 15, 2016.

"Two Businessmen Own 18 U.S. Missile Silos." *The Washington Post and Times-Herald*, May 17, 1966. http://www.proquest.com (accessed February 15, 2016).